

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-11 (Cancelled)

(Please add the following new claims:)

12. (New) An assembly for mounting and sealing a saddle on a pipe, the assembly comprising:

a saddle hub, the saddle hub including lateral attachment means disposed on each side of the saddle hub;

a saddle hub mounting device, the saddle hub mounting device including tightening means for tightening the saddle hub, the tightening means being configured to cooperate with the lateral attachment means and including an open and deformable bracelet, the bracelet including a band that is configured to be installed on the saddle hub by rotation, the band defining a plurality of spaced openings to enable the saddle hub to fit pipes of various outer diameters by attachment to the lateral attachment means of the saddle hub through selected openings in the bracelet, the saddle hub and the bracelet forming a ring, the lateral attachment means being configured to enable the saddle hub to fit pipes of different outer diameters by attaching and tightening to the tightening means.

13. (New) The assembly of claim 12, wherein the saddle hub is a bypass saddle hub.

14. (New) The assembly of claim 12, wherein the saddle hub forms part of a closing tap.

15. (New) The assembly of claim 12, wherein the saddle hub defines an opening having an axis that is aligned with a radial axis of the pipe, and wherein the assembly further includes a first gasket, a sleeve mounted on the first gasket and a second gasket mounted on the sleeve and in contact with the attachment means.

16. (New) The assembly of claim 12, wherein the attachment means includes a thread tapping.

17. (New) The assembly of claim 15, wherein the first and second gaskets and the sleeve define an internal diameter that is larger than the bypass opening of the pipe.

18. (New) The assembly of claim 12, further comprising a seal disposed between the ring and the pipe, the seal including a lipped gasket that defines a concave lower surface defining a radius of curvature that is at least equal to a curvature of the pipe, the lipped gasket including a peripheral portion that includes an edge delimiting two surfaces, an upper surface of the lipped gasket defining a bulged profile.

19. (New) Assembly according to claim 18, wherein the peripheral and upper surfaces of the lipped gasket are disposed in a space defined under a sole of the saddle hub, the lipped gasket defining a hollow portion including an upper face facing away from the pipe and a lower face facing toward the pipe, the upper and lower faces having different slopes.

20. (New) Assembly according to claim 19, wherein the lipped gasket is configured

such that a pressure of fluid crossing the hollow portion of the lipped gasket is separated into a first fluid pressure component directed toward the upper face and a second fluid pressure component directed toward the lower face, the lipped gasket being configured to seal with pipes of various diameters by varying an intensity and place of the fluid pressure and a compression of the gasket on the pipe.

21. (New) Assembly according to claim 20, wherein the saddle hub is configured to contact the pipe upon compression of the gasket.

22. (New) Assembly according to claim 12, wherein the band is configured to be dimensioned according to an outer diameter of the pipe onto which the saddle is to be fitted.

23. (New) Assembly according to claim 12, wherein an end of the bracelet is clamped down on a cylindrical nut by a screw inserted through an opening defined in the bracelet.

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24. Assembly according to claim 23, wherein a head of the screw is configured to press the end of the bracelet toward the lateral attachment means of the saddle hub.

25. (New) Assembly according to claim 23, wherein at least one of the lateral attachment means defines two fingers arranged in a shape of a fork.

26. (New) Assembly according to claim 12, wherein one of the lateral attachment means is shaped as a T and wherein one end of the bracelet is mounted by rotation on the saddle

hub by a nut and screw around the T-shaped lateral attachment means and wherein another end of the bracelet is attached to the other one of the lateral attachment means.

27. (New) Assembly of claim 12, wherein the openings are defined from end to end of the bracelet at regular intervals.

28. (New) Assembly of claim 25, further comprising a washer configured to cooperate with the screw, a first surface of the washer being flat and a second surface of the washer being convex, the washer being mounted on the screw such that the first flat surface is in contact with a head of the screw and such the convex second surface is arranged in a hollow defined between the two fingers of the fork.

29. (New) Assembly of claim 12, wherein the saddle hub includes bronze and wherein the band is formed of a non-corrodible material coated with an inert material.

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30. (New) Assembly of claim 29, wherein the inert material includes an epoxy-based powder composition.

31. (New) Method for mounting and sealing a saddle hub on a mains pipe to connect an auxiliary bypass pipe on the mains pipe, the saddle hub including lateral attachment means disposed on each side of the saddle hub, comprising:

providing saddle hub mounting device configured to connect to the auxiliary bypass pipe, the saddle hub mounting device including tightening means for tightening the saddle hub, the

tightening means being configured to cooperate with the lateral attachment means and including an open and deformable bracelet, the bracelet including a band that is configured to be installed on the saddle by rotation, the band defining a plurality of spaced openings to enable the saddle hub to fit pipes of various outer diameters by attachment to the lateral attachment means of the saddle hub through selected openings in the bracelet, the saddle hub and the bracelet forming a ring, the lateral attachment means being configured to enable the saddle hub to fit pipes of different outer diameters by attaching and tightening to the tightening means;

dimensioning the bracelet according to an outer diameter of the pipe;

shaping the bracelet to the pipe and tightening the bracelet to the pipe by tightening the tightening means to the lateral attachment means;

attaching the saddle hub mounting device on the saddle hub;

mounting, in a waterproof manner, a boring machine having a drill on an upper opening of the saddle hub mounting device;

boring the pipe using the drill;

removing the boring device from the saddle hub mounting device;

locking the saddle hub mounting device, and

connecting the auxiliary bypass pipe to the saddle hub.

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32. (New) Method of claim 31, wherein the tightening and shaping step is carried out by rotating the bracelet.

33. (New) Method of claim 31, wherein the tightening and shaping step is carried out with a single tool.

34. (New) Method of claim 31, wherein the dimensioning step includes a step of dimensioning a length of the band according to an outer diameter of the pipe onto which the saddle is to be fitted.

35. A bypass tap for a pipe, comprising:

a tap body defining an axis;

a saddle hub, the saddle hub and the tap body being a one-piece assembly, the body and saddle hub assembly including at least two attachment means that are disposed radially relative to the axis of the tap body and that are disposed on opposite sides of the saddle hub, and

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a saddle hub mounting device, the saddle hub mounting device including tightening means for tightening the saddle hub, the tightening means being configured to cooperate with the two attachment means and including an open and deformable bracelet, the bracelet including a band that is configured to be installed on the saddle by rotation, the band defining a plurality of spaced openings to enable the saddle hub to fit pipes of various outer diameters by attachment to the lateral attachment means of the saddle hub through selected openings in the bracelet, the saddle hub and the bracelet forming a ring, the attachment means being configured to enable the saddle hub to fit pipes of different outer diameters by attaching and tightening to the tightening means.
